

REMARKS

The Office Action of January 7, 2011, has been carefully studied. Claims 2, 3 and 9 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Claim Amendments

Claim 1 has been amended to recite that the content of the saccharide derivative of α,α -trehalose comprises 50% or more of α -maltosyl α,α -trehalose. Support for this amendment can be found in the specification as filed at page 12, lines 2-5. Claim 1 has been further amended to delete the phrase "in liquid or paste form" from step (A) because this is redundant in light of step (B). The position of "other" has been changed.

Art Rejections

Claims 1, 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa, JP 09-197249, in view of Aga et al., US 5,922,324 and further in view of Maruta et al., US 5,610,047.

The Examiner states that, while Hasegawa in view of Aga do not specifically teach mixing the hydrophobic non-saccharide ingredient with the claimed saccharide derivative of α,α -trehalose in amorphous form, Maruta is deemed to teach the claimed saccharide derivative of α,α -trehalose comprising

the claimed amount of α -maltosyl α,α -trehalose, and further comprising the other claimed saccharides in an amorphous form. Based upon this, the Examiner asserts that it would have been obvious to one of ordinary skill in the art, at the time that the invention was made, for the method of powderizing a non-saccharide ingredient such as propolis extract of Hasegawa in view of Aga to have further comprised substituting the claimed saccharide derivative of Maruta for the trehalose of 'Hasegawa in view of Aga.

This rejection is respectfully traversed.

It is respectfully submitted that Maruta discloses trehalose and saccharide derivatives of trehalose as those which are produced by non-reducing saccharide forming enzymes, and further discloses that trehalose and saccharide derivatives of trehalose are used as quality-improving agents or stabilizing agents because they are non-reducing and stable. However, it should be noted that Maruta teaches anhydrous crystalline trehalose with respect to the use for powderizing base (see column 11, lines 61-65). Although Maruta teaches that crystalline trehalose is non-hygroscopic or less-hygroscopic, there is nothing in Maruta that teaches the hygroscopic properties of saccharide derivatives of α,α -trehalose. Moreover, there is nothing in Maruta that even suggests the utility of saccharide derivatives of α,α -trehalose as a powderizing base.

Submitted herewith is a copy of Mandai et al., US 5,543,513, that teaches a powderizing method using trehalose. Mandai teaches that anhydrous crystalline trehalose easily converts to hydrous crystalline trehalose by

absorbing water from a hydrous component in order to dehydrate and powderize the component (see column 2, lines 13-35). As is evident from this teaching, the usefulness of trehalose as a powderizing agent is largely dependent upon the trehalose being in crystalline form.

On the other hand, α -maltosyl α,α -trehalose is a non-crystalline saccharide, and the presence of crystalline α -maltosyl α,α -trehalose has not yet been known. As recited in the amendment to claim 1, the claimed saccharide derivative of α,α -trehalose comprises 50% (w/w) or more of a α -maltosyl α,α -trehalose. It is not reasonable to expect that the saccharide derivative comprising 50% (w/w) or more of α -maltosyl α,α -trehalose that is not in crystalline form would be useful as a powderizing base.

It is therefore believed that it would not have been obvious to one skilled in the art to replace the trehalose in Hasegawa with the herein claimed saccharide derivative of α,α -trehalose with a reasonable expectation that one would obtain a useful powderizing base.

It should be noted that the compositions in powder form in Maruta (Examples B-1, B-6, B-11 and B-12) are not those powder zed by saccharide derivatives of α,α -trehalose. For instance, the compositions of Examples B-1 and B-6 are prepared by mixing saccharide derivatives of α,α -trehalose **in powder form**. Further, the compositions of Examples B-11 and B-12 are prepared by using not the saccharide derivatives of α,α -trehalose, but of crystalline trehalose.

Accordingly, it is respectfully submitted that there is nothing in Maruta that suggests the method claimed herein.

The Examiner indicates that Maruta teaches a method for incorporating the non-reducing saccharide into the composition by "spray drying" (at page 6, paragraph 12 of the Office Action). However, in the herein claimed method as defined in claim 9, spray drying is used solely for powderizing, and not for incorporating the claimed saccharide derivative into the hydrophobic non-reducing saccharide ingredients. The saccharide derivative of α,α -trehalose is already mixed with the hydrophobic non-saccharide ingredients before spray drying. Therefore, it is respectfully submitted that spray drying in the herein claimed method is not the same as in the method of Maruta.

Aga uses anhydrous crystalline trehalose for powderizing propolis extract. There is nothing in Aga that suggests the use of the saccharide derivative of α,α -trehalose for powderizing propolis extract. It is respectfully submitted that Aga suggests nothing about the use of the saccharide derivatives of α,α -trehalose comprising 50% or more of α -maltosyl α,α -trehalose as a powderizing base to obtain a composition in powder form.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1, 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roser, US 2002/0012687, in view of Maruta.

This rejection is respectfully traversed.

Roser discloses the use of trehalose in solid dose vehicles for stabilizing propolis. However, there is nothing in Roser that teaches the use of the of the saccharide derivative of α,α -trehalose. There is also nothing in Roser that suggests the use of the saccharide derivatives of α,α -trehalose in place of trehalose. Roser teaches nothing about the use of the saccharide derivative of α,α -trehalose as a powderizing base to obtain a composition in powder form.

It is respectfully submitted that claims 1, 3 and 9 are not obvious over Roser in view of Maruta.

Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,
BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicants

By /Ronni S. Jillions/
Ronni S. Jillions
Registration No. 31,979

RSJ:srd
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528

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